REMARKS

1. Summary of Office Action

In the Office Action mailed May 1, 2006, the Examiner rejected claims 1-4, 6-10, and 12-22 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,977,899 (Matragi). Further, the Examiner rejected claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Matragi in view of U.S. Patent No. 6,810,343 (McKee). Still further, the Examiner rejected claim 11 under 35 U.S.C § 103(a) as being unpatentable over Matragi in view of U.S. Patent No. 5,280,630 (Wang). In addition, the Examiner rejected claims 23 and 24 under 35 U.S.C. § 103(a) as being unpatentable over Matragi in view of Applicant's admitted prior art (AAPA).

2. Status of the Claims

Presently pending in this application are claims 1-24 of which claims 1 and 16 are independent.

3. Summary of the Claimed Invention

Claims 1-24 are directed to a method of selecting available channel resource devices when completing a call connection. A channel evaluator receives connection outcome results of previous call connections, in which the connection outcome results are indicative of channel resource device failures.

A statistical analysis is then generated based at least in part, on the connection outcome results. Examples of the statistical analysis could include "a moving average, a time weighted average, an asymmetric moving average, a combination of averages and a time dissolve average" (*See* Applicant's specification, at page 10, lines 20-22). Applicant's

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specification explains that the "statistical analysis is generated in an attempt to determine the quality of the channels" (*See* Applicant's specification, at page 10, lines 22-23).

The evaluator then uses the generated statistical analysis to assign another incoming call to an available channel resource device to complete a call connection.

Each of the independent claims 1 and 16 recite the method of assigning or routing an incoming call to a available channel resource device in response to a statistical analysis. In particular:

- Claim 1 recites "assigning an incoming call to at least one available channel resource device of the plurality of channel resource devices, said at least one available channel resource device selected at least in part, in response to the statistical analysis."
- Claim 16 recites "a call router for routing incoming calls to available channel resource devices selected in response to the statistical analysis".

4. Summary of Matragi

Matragi is directed to a method and apparatus for "alleviating congestion and overload in a distributed call-processing system interconnected through a packet based network" (*See* Matragi at Abstract). Matragi teaches that "if a call processor determines that it is too congested to process a call, the call processor enters an overload condition, selects an alternate call processor and forwards the request to an alternate call processor." *Id.*

The ordered list of call processors may be stored in an overload control analysis table. As shown in Figure 3 of Matragi, the overload control analysis table may have the following fields: call processor 340, congestion indicator 345, last message sent 350, and timer 355. *Id.* at column 5, lines 5-28.

In column 7, lines 1-43 Matragi presents an example in which a call processor, CP1, selects and forwards a "message to the next available alternate call processor." *Id.* at column

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7, lines 10-11. According to the example, CP1 determines that CP4 is the available alternate call processor.

Further, in this example, Matragi teaches that CP1 carries out a series of "if-then" statements to check the values stored in the fields of the overload control analysis table. *Id.* at column 7, lines 1-43. Using the "if-then" statements, CP1 determines that call processor CP4 is the available alternate call processor and that CP2 and CP3 are unavailable to receive a forwarded call request from CP1.

5. Response to Examiner's Rejections under 35 U.S.C § 102(e)

In the Office Action mailed May 3, 2006, the Examiner rejected independent claims 1 and 16 under 35 U.S.C § 102(e) as being anticipated by Matragi. Applicant respectfully traverses the anticipation rejection because the Examiner has not established that Matragi teaches each and every element of any of these claims as would be required to support an anticipation rejection under M.P.E.P. § 2131.

Matragi does not teach a method of assigning or routing an incoming call to an available channel resource device in response to a statistical analysis as set forth in the pending claims. Rather, Matragi teaches a method of selecting an alternate call processor based on the alternate call processor's availability. As noted above, Matragi in column 7, lines 1-43 presents an example in which call processor CP1 determines that call processor CP4 is an available alternate call processor. Call processor CP1, then, selects call processor CP4 and forwards a call set up message to CP4.

Matragi's steps of selecting an available alternate call processor by going through an ordered list of call processors (using "if-then" statements) to determine whether a call processor is an "available alternate call processor" does not amount to a method of assigning

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or routing an incoming call to an available channel resource device in response to the *statistical analysis*.

As noted above, Matragi selects the next available call processor listed in an overload control analysis table based on whether or not certain "if-then" conditions are met. Therefore, even though there may be other available alternate call processors listed in the overload control analysis table, Matragi selects the next available call processor for which the "if-then" conditions are met.

In contrast to Matragi, Applicant claims a method in which an incoming call is routed to at least one available channel resource device based on a statistical analysis out of the many available channel resource devices. Thus, according to Applicant's claimed invention, all of the available channel resource devices are considered before the at least one available channel resource device is assigned (based on the statistical analysis) to the incoming call. As a result, certain channel resource devices might not be selected, even though they are not congested or are otherwise available for assignment. A particular advantage of Applicants' claimed invention is that available channel resource devices (those that report as being available) might be effectively de-commissioned because the call assignment is based not only availability, but on the statistical analysis of their past behavior.

On page 3 of the Office Action, the Examiner parenthetically inserted "overload control analysis table" and "ordered list" and cited column 6, lines 1-9 in Matragi in an effort to establish that Matragi teaches a method of assigning or routing an incoming call to an available channel resource device in response to the *statistical analysis*.

In column 6, lines 1-9, Matragi states that "[i]f, however, it is determined during step 430 that the total congestion indicator flag is not set, then the outgoing congestion evaluation

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process 400 proceeds to identify an alternate call processor 120 in accordance with the present invention. Thus, the overload control analysis table 300 is utilized during step 440 to identify the next call processor 120 in the ordered list that is not overloaded and did not receive the last forwarded congestion message from the current call processor 120 (CI and LMS =0)."

This portion in Matragi does not teach a method of assigning or routing an incoming call to an available channel resource device in response to the *statistical analysis*. Rather, this portion in Matragi teaches a method of going through an ordered list of call processors in the overload control analysis table and if the fields "CI and LMS=0" for a listed call processor then that call processor is selected as the available alternate call processor. As noted above, selecting an available alternate call processor by going through an ordered list of call processors (using "if-then" statements) to determine whether a call processor is an "available alternate call processor" does not amount to a method of assigning or routing an incoming call to an available channel resource device in response to the *statistical analysis*.

Further, on page 3 of the Office Action, the Examiner parenthetically inserted "overload condition" and "selects an alternate call processor" and cited column 2, lines 30-34 in an effort to establish that Matragi teaches a method of assigning or routing an incoming call to an available channel resource device in response to the *statistical analysis*.

In column 2, lines 30-34, Matragi states that "[a]ccording to an aspect of the invention, if a call processor determines that it is too congested to process a call, the call processor enters an overload condition, selects an alternate call processor and forwards the request to the alternate call processor."

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This portion in Matragi also fails to teach the method of assigning or routing an incoming call to an available channel resource device in response to the *statistical analysis*.

Thus, Matragi does not teach the method of assigning or routing an incoming call to an available channel resource device in response to the *statistical analysis* as required by Applicant's independent claims 1 and 16. Consequently, Matragi does not anticipate any of these claims. Each of claims 2-15 and 17-24 depends from, and thus incorporates all of the limitations of, one of these independent claims. Thus, for at least the same reason, dependent claims 2-15 and 17-24 are also allowable.

6. Response to Examiner's Rejections under 35 U.S.C § 103(a)

a. Claim 5

As noted above, the Examiner rejected claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Matragi in view of McKee.

In particular, on page 10 of the Office Action, the Examiner stated that "Matragi is silent on the buffer is a circular buffer." Further, the Examiner stated that "McKee teaches a circular buffer (col. 3 lines 19-22)." The Examiner concluded that "[t]herefore, it would have been obvious skill in the art, to modify the systems of Matragi by replacing the buffer (fig. 2 box 220) with a circular buffer." *Id.*

For the reasons set forth above, Applicant submits that Matragi fails to teach a method of assigning or routing an incoming call to an available channel resource device in response to the *statistical analysis* as required by independent claim 1. Claim 5 depends from, and thus incorporates all of the limitations of, independent claim 1. Thus, Applicant submits that the Examiner's citation of circular buffer in McKee fails to make up for Matragi's deficiency.

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Because the Examiner has failed to establish that the combination of Matragi and McKee teaches a method of assigning or routing an incoming call to an available channel resource device in response to the *statistical analysis*, in the context of claim 5, the Examiner has not made out a *prima facie* case of obviousness. Therefore, Applicant submits that claim 5 is allowable.

b. Claim 11

As noted above, the Examiner rejected claim 11 under 35 U.S.C. § 103(a) as unpatentable over Matragi in view of Wang.

In particular, on page 10 of the Office Action, the Examiner stated that "Matragi is silent on indicating to a user a change in channel resource device status." Further, the Examiner stated that "Wang teaches indicating to a user a change in status (list of channels in decreasing preference, handset would choose the first acceptable channel and identify to the base station the acceptable channel, col. 7, lines 37-42)." *Id.* On page 11 of the Office Action, the Examiner stated that it would have been obvious to combine the two references.

For the reasons set forth above, Applicant submits that Matragi fails to teach a method of assigning or routing an incoming call to an available channel resource device in response to the *statistical analysis* as required by independent claim 1. Claim 11 depends from, and thus incorporates all of the limitations of, independent claim 1. Thus, Applicant submits that the Examiner's citation of column 7, lines 37-42 in Wang fails to make up for Matragi's deficiency.

Because the Examiner has failed to establish that the combination of Matragi and Wang teaches a method of assigning or routing an incoming call to an available channel resource device in response to the *statistical analysis*, in the context of claim 11, the

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Examiner has not made out a *prima facie* case of obviousness. Therefore, Applicant submits that claim 11 is allowable.

c. Claims 23 and 24

As noted above, the Examiner rejected these remaining claims on grounds of obviousness over combinations of Matragi and Applicant's admitted prior art (AAPA).

On page 11 of the Office Action, the Examiner stated that "Matragi is silent on channel resource failures being hardware (claim 23) or software (claim 24)." Further, the Examiner stated that "AAPA teaches channel resource device failures being hardware or software (pg. 3, lines 2-4)." *Id.* The Examiner then concluded that it would have been obvious to combine the two.

For the reasons set forth above, Applicant submits that Matragi fails to teach a method of assigning or routing an incoming call to an available channel resource device in response to the *statistical analysis* as required by independent claim 1. Each of claims 23 and 24 depends from, and thus incorporates all of the limitations of, independent claim 1. Thus, Applicant submits that the Examiner's citation of "channel resource device failures being hardware of software" fails to make up for Matragi's deficiency.

Because the Examiner has failed to establish that the combination of Matragi and AAPA teaches a method of assigning or routing an incoming call to an available channel resource device in response to the *statistical analysis*, in the context of claims 23 and 24, the Examiner has not made out a *prima facie* case of obviousness. Therefore, Applicant submits that each of claims 23 and 24 is allowable.

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7. Conclusion

In view of the foregoing, Applicant submits that claims 1-24 are allowable, and thus Applicant respectfully requests favorable reconsideration and allowance of these claims. Should the Examiner wish to discuss this case with the underisigned, the Examiner is invited to call the undersigned at (312) 913-3305.

Respectfully submitted,

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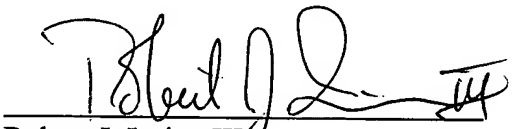
Date: June 30, 2006

By: 

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